

Docket No.: 071971-0281

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Customer Number: 53080
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Akihiro WATABE, et al.	:	Confirmation Number: 4946
	:	
Application No.: 10/541,221	:	Group Art Unit: 2473
	:	
Filed: July 01, 2005	:	Examiner: BOKHARI, Syed M.
	:	
For: CODE CONVERSION METHOD AND DEVICE THEREOF		

AMENDMENT FILED WITH RCE

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

A Request for Continued Examination and the following amendment and remarks are submitted in response to the Office Action dated August 27, 2010, having a three-month shortened period for response set to expire November 27, 2010, with a petition for a two-month extension of time up to and including January 27, 2011 being filed concurrently herewith.

Amendments to the Claims are reflected in the listing of amended claims beginning on page 2 of this paper. This listing of claims replaces all prior versions, and listings, of claims in the application.

Remarks begin on page 6.

AMENDMENTS TO THE CLAIMS

Please enter the following amendments:

1. (Currently Amended) A code translation method comprising the steps of:
receiving an input code stored in a hierarchical data structure, the input code including
a first value in a parameter of the hierarchical data structure which determines the
an allowable range of data amount in the input code,
user data in ~~[[at]]~~ a first ~~level~~ layer of the hierarchical data structure, and
main data in ~~[[at]]~~ a second ~~level~~ layer of the hierarchical data structure;
storing the user data and main data in a data buffer; and
generating an output code stored in the hierarchical data structure, the output code
including by modifying the input code, by
the stored main data,
moving the stored user data to a third level in a layer of the hierarchical data
structure other than the first layer, and
changing a second value in the parameter of the hierarchical data structure which
determines an allowable range of data amount in the output code, the second value being
different from the first value to reflect the change in code size a change from the allowable range
of data amount in the input code effected by moving the user data from the input code to the
output code;
wherein the stored main data included in the output code is identical to the main data
included in the input code.

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2. (Currently Amended) The code translation method of claim 1, wherein the hierarchical data structure conforms with the ISO 13818-2 standard; the parameter ~~which determines the allowable range of data amount in the input code of~~ the hierarchical data structure is one of a bit rate value, a VBV (Video Buffering Verifier) buffer size value, and a VBV delay value; and

the main data comprises compressed video data.

3. (Currently Amended) The code translation method of claim 2, wherein the first ~~level~~ layer of the hierarchical data structure is the Group of Pictures (GOP) layer; and the third ~~level~~ layer of the hierarchical data structure is the picture layer.

4. (Currently Amended) The code translation method of claim 2, wherein the first ~~level~~ layer of the hierarchical data structure is the picture layer; and the third ~~level~~ layer of the hierarchical data structure is the Group of Pictures (GOP) layer.

5. (Canceled)

6. (Currently Amended) The code translation method of claim 1, further comprising the step of generating additional information for distinguishing the user data included in the input code from the ~~[[other]]~~ main data,

wherein generation of the output code is advanced according to the additional information.

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7 - 10. (Canceled)

11. (Currently Amended) A code translation device comprising:

a data analyzing section adapted to identify in an input code stored in a hierarchical data structure

a first value in a parameter of the hierarchical data structure which determines ~~[[the]]~~ an allowable range of data amount in the input code,

user data in ~~[[at]]~~ a first ~~level~~ layer of the hierarchical data structure, and

main data in ~~[[at]]~~ a second ~~level~~ layer of the hierarchical data structure; and

a multiplexing section which produces an output code stored in a hierarchical data structure, the output code including in which the input code is modified by moving

the stored main data,

the user data ~~to a third level~~ in a layer of the hierarchical data structure other than the first layer,

~~changing~~ a second value in the parameter of the hierarchical data structure which determines an allowable range of data amount in the output code, the second value being different from the first value to reflect the change in code size a change from the allowable range of data amount in the input code effected by moving the user data from the input code to the output code; ~~and including~~

wherein the main data included in the output code[[,]] is identical to the main data included in the input code.

12 - 13. (Canceled)

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14. (Currently Amended) The code translation device of claim 11, wherein
the hierarchical data structure conforms with the ISO 13818-2 standard;
the parameter ~~which determines the allowable range of data amount in the input code of~~
the hierarchical data structure is one of a bit rate value, a VBV (Video Buffering Verifier) buffer
size value, and a VBV delay value; and
the main data comprises compressed video data.

15. (Currently Amended) The code translation device of claim 14, wherein
the first level layer of the hierarchical data structure is the Group of Pictures (GOP) layer;
and
the third level layer of the hierarchical data structure is the picture layer.

16. (Currently Amended) The code translation device claim 14, wherein
the first level layer of the hierarchical data structure is the picture layer; and
the third level layer of the hierarchical data structure is the Group of Pictures (GOP)
layer.

17. (New) The code translation method of claim 1, wherein
the stored main data included in the output code is in the second layer of the of the
hierarchical data structure.

18. (New) The code translation device of claim 14, wherein
the stored main data included in the output code is in the second layer of the of the
hierarchical data structure.

REMARKS

Claims 1-4, 6, 11, and 14-16 are currently pending in this application. By this Amendment, claims 1-4, 6, 11, and 14-16 are amended. Support for the amendments is found in the specification, including the claims, as originally filed. Favorable reconsideration of the application in light of the foregoing amendments and following comments is respectfully solicited.

Telephone Interview of December 20, 2010

Applicants thank Examiner Bokhari for conducting a telephone interview with the undersigned. In the interview was discussed Cheney as it relates to the previously presented “changing the parameter to reflect the change in code size effected by moving the user data.” Additionally, the Examiner offered suggestions for clarifications to the claims, which are reflected in the amendments to claims 1 and 11 above.

Rejection Under 35 U.S.C. § 103(a)

In section 9 of the Office Action, claims 1-4, 6, 11, and 14-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,671,323 (Tahara) in view of U.S. Patent No. 5,576,765 (Cheney) in view of U.S. Patent No. 6,075,900 (Sakazawa). Applicants respectfully traverse.

Independent claim 1 recites, *inter alia*, “receiving an input code stored in a hierarchical data structure,” “generating an output code stored in the hierarchical data structure.” Accordingly, the input and output codes are both stored according to the same structure. In contrast, each of the portions of Tahara, Cheney, and Sakazawa disclose techniques whereby the input and output data is not stored according to the same structure. For example, the MPEG

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decoder in Tahara, FIG. 31, receives an elementary stream at receive buffer 401, and multiplexer 417 outputs a base-band video signal (*see* col. 5, line 64 to col. 6, line 3 (“studios 145A to 145D perform . . . operations on base-band video signals rather than . . . on encoded streams”); col. 6, lines 11-12 (“MPEG decoders 144A to 144D receive the elementary streams”)). As another example, in Cheney, the MPEG decoder is “receiving compressed encoded digital video signals and transmitting decompressed decoded digital video signals” (claim 1). As another example, in Sakazawa there is no indication that data output by the packetizers is stored in a hierarchical data structure that this the same as a hierarchical data structure used for storing data received by separating unit 2. Thus, the cited art does not disclose or suggest the subject matter recited in claim 1.

This shortcoming would not be overcome by simply passing an input code through an MPEG decoder (*e.g.*, decoder 144A shown in Tahara, FIG. 1) to produce an intermediate data and reencoding the intermediate data using an MPEG encoder (*e.g.*, encoder 142A shown in Tahara, FIG. 4), as claim 1 also requires that “the stored main data included in the output code is identical to the main data included in the input code.” It was well known in the art that by such a process the main data would not remain the same. Thus, the cited art does not disclose or suggest the subject matter recited in claim 1.

Additionally, the code length obtained with the VLC decode described by Cheney does not disclose or make obvious “a second value in the parameter of the hierarchical data structure which determines an allowable range of data amount in the output code, the second value being different from the first value to reflect a change from the allowable range of data amount in the input code effected by moving the user data from the input code to the output code,” as recited in claim 1. However, Cheney’s code length is not “effected by moving the user data from the input

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code to the output code,” as recited in claim 1, and does not disclose or suggest what is claimed.

Tahara and Sakazawa do not bridge this gap between claim 1 and Cheney.

For much the same reasons, independent claim 11 is also not obvious in view of the cited art.

Thus, Applicants respectfully request withdrawal of the rejection of independent claims 1 and 11, and claims 2-4, 6, and 14-16 which depend thereon.

Conclusion

Accordingly, it is urged that the application, as now amended, is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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